# COMMONWEALTH OF VIRGINIA Department of Environmental Quality Piedmont Regional Office

# STATEMENT OF LEGAL AND FACTUAL BASIS

Georgia-Pacific Wood Products LLC - Jarratt Jarratt, Virginia Permit No. PRO50253

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Georgia-Pacific Wood Products LLC has applied for a Title V Operating Permit for its Jarratt facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:	Date:	
Air Permit Manager:	Date:	
Deputy Regional Director:	Date:	
•		

#### **FACILITY INFORMATION**

Permittee
Georgia-Pacific Wood Products LLC
133 Peachtree St. NE
Atlanta, Georgia 30303

<u>Facility</u>
Georgia-Pacific Wood Products LLC - Jarratt
116 S. Allen Road
Jarratt, Virginia 23867

County-Plant Identification Number: 51-081-0002

#### SOURCE DESCRIPTION

NAICS 321219 – Wood Product Manufacturing SIC 2493 – Wood Product Manufacturing

The facility is a softboard sheathing manufacturing facility which is operated by Georgia-Pacific Wood Products LLC. The softboard sheathing manufacturing operations include wood chip blending, pulping, mat blending, forming, and trimming, board pressing, trimming operations, seal coating, and woodwaste handling operations. The major emission sources are the boiler and dryers.

The facility is a Title V major source of VOC,  $NO_X$ , SO2, and PM-10. This source is located in an attainment area for all pollutants, and is a PSD major source. The facility is currently permitted under:

- 11/26/2003 PSD permit (No. 3 boiler)
- Consent Order dated 9/28/1998 (as amended on 4/28/2000)
- 7/22/94 NSR permit (Paint Spray Booth)
- 7/22/2005 NSR permit (Hot Roll Coating Operation)

#### **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted on May 25, 2006. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

# **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date			
Fuel Burnir	Fuel Burning Equipment									
03	EP-15	Keeler Boiler No. 3 (1978)	86.61 MMBtu/hr	- PPC Industries ESP 11R-1220-27125 - Zurn-type multiclone MTSA-56-96YT		PM, PM-10, Particulate HAPs	11/26/03			
Process Eq	uipment									
F-B-16 F-B-17	Fugitive	Coal Handling (1978)	110 tons/hr			No Control	None			
E-CP-2	CP-20	NW Silo Cyclone (1972)	60 tons/hr			No Control	None			
E-CP-3	CP-21	NE Silo Cyclone (1972)	60 tons/hr			No Control	None			
E-CP-4	CP-22	SW Silo Cyclone (1972)	60 tons/hr			No Control	None			
E-CP-5	CP-29	#5 Refiner Cyclone (1972)	60 tons/hr			No Control	None			
E-CP-6	CP-33	#1-4 Refiners Cyclone (1972)	60 tons/hr			No Control	None			
F-CP-1	CP-2	Chip Unloading Hopper and Conveyor (1972)	60 tons/hr			No Control	None			

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
F-CP-2	CP-4	Vibrating Screen (1972)	120 tons/hr			No Control	None
F-CP-3A	CP-7	Accepts Conveyor (1972)	120 tons/hr			No Control	None
F-CP-3B	CP-8	Transfer Conveyor (1972)	120 tons/hr			No Control	None
F-CP-4	CP-9	Pile/feeder blower (1972)	120 tons/hr			No Control	None
E-PP-11	Zone 1 Dryer	Dryer (Zone 1) 1987	12.9 tons/hr (37 mbf/hr) (3792 cfm/36" dia)			No Control	09/28/98
E-PP-12	Zone 2 Dryer	Dryer (Zone 2) (1987)	12.9 tons/hr (37 mbf/hr) (3792 cfm/36" dia)			No Control	09/28/98
E-PP-13	Zone 3 Dryer	Dryer (Zone 3) (1987)	12.9 tons/hr (37 mbf/hr) (3792 cfm/36" dia)			No Control	None
E-PP-7	PP-7	Vent, No. 5 refiner dump chest (1972)	6 tons/hr			No Control	None
E-PP-8	PP-5	Vent, main refiner chest (1972)	24 tons/hr			No Control	None
E-TS-1	EP-14	Trim Saws (2000)		Ducon Dust Collector	E-PL-39	PM, PM-10	None

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
E-PB-1	EP-16	Paint Spray Booth (1994)	3.8 gallons/min	-		VOC, PM, PM-10	7/22/94
F-HR-1	HR-1	Hot Roll Coating Operation (2003)	8400 square feet/hr			None	2/10/04

# **EMISSIONS INVENTORY**

Emissions are summarized in the following tables.

2006 Criteria Pollutant Emission in Tons/Year						
Emission Unit	voc	СО	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	
No. 3 (Keeler boiler)	2.1	10.4	298.3	49.2	170.6	
Hot Roll Coating Operation						
1 Fiberboard Drying	311.3			64.3		
1st/2nd Pass Trim Saws, Slat Bed Saw, Sample Saw, Planer				8.9		
4 Fiberboard Process/Refiners	307.9			62.8		
5-1 Chipwd/Cyclone				3.3		
12-14 Chipwd/Slab				2.4		
Monogram Paste Ink	0.7					
Fiberboard, Painting				0.3		
Total	622.0	10.4	298.3	191.2	170.6	

Pollutant	Actual Hazardous Air Pollutant Emissions in 2006 in Tons/Year
Acetaldehyde	0.84
Ammonia	0.01
Arsenic Compounds	0.11
Beryllium Compounds	0.004
Cadmium Compounds	0.002
Cobalt Compounds	0.03
Chromium Compounds	0.023
Formaldehyde	1.72
HCI	0.13
HF	1.67
Lead	0.07
Manganese Compounds	0.16
Mercury	0.002
Methyl Ethyl Ketone	0.51
Naphthalene	0.1
Nickel Compounds	0.04
POM	0.19
Selenium	0.052

#### EMISSION UNIT APPLICABLE REQUIREMENTS - No. 3 Boiler (EU ID #03)

There are two sources of specific applicable requirements for the No. 3 boiler: The 11/26/2003 PSD permit and 40 CFR 63, Subpart DDDDD.

Georgia-Pacific Wood Products LLC - Jarratt is subject to Subpart DDDDD since they meet the applicability requirement stated in 40 CFR 63.7490 as being an existing boiler at a major source of HAPs. The facility meets the Subpart DDDDD definition of "large solid fuel subcategory."

#### A. Limitations

#### 11/26/03 PSD Permit

 Particulate emissions from the No. 3 Keeler boiler shall be controlled by an electrostatic precipitator (ESP) and two (2) multicyclones in series. The ESP and multicyclones shall be provided with adequate access for inspection. An annual inspection shall be conducted on the multicyclones to ensure structural integrity.
 (9 VAC 5-80-110 and Condition 3 of 11/26/03 Permit)

\*\*Note: The ESP was added into this condition even though it is not listed in the 11/26/2003 permit. The ESP has been added to the boiler so that the source can meet Subpart DDDDD requirements. Therefore, the ESP addition to the Title V is through the citation 9 VAC 5-80-110.

2. The approved fuel for the boiler is coal. A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 4 of 11/26/03 Permit)

3. The sulfur and ash contents of the coal consumed by the No. 3 boiler shall not exceed 1.0 percent and 8.8 percent by weight, respectively, per shipment. The permittee shall maintain records (supplier fuel analysis) of all coal shipments purchased. These records shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 5 of 11/26/03 Permit)

- The No. 3 boiler shall consume no more than 28,711 tons per year of coal, calculated as the sum of each consecutive twelve (12) month period.
   (9 VAC 5-50-260, and Condition 6 of 11/26/03 Permit)
- 5. The steam flow and operating steam pressure of the No. 3 boiler shall not exceed 85,000 pounds per hour (1-hr avg. with an interval of 15 minutes or less) and 340 psig, respectively. The steam flow, steam pressure, and feedwater temperature shall be continuously monitored and recorded to indicate hourly compliance with the boiler maximum rated capacity of 86.61 MMBtu/hr. These operating limits shall apply at all times except during startup, shutdown and malfunction.

\*\*Note: Added in response to permittee comment submitted during public notice period during the issuance period:

Whenever the boiler is in operation, the monitoring system shall be monitoring except during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, and the monitoring system shall be capable of completing at least one cycle of operation (i.e., measuring and recording) every 15 minutes.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 7 of 11/26/03 Permit)

6. Emissions from the operation of the No. 3 boiler shall not exceed the limits specified below:

Particulate Matter	20.0	lbs/hr	88.0	tons/yr
PM-10	14.5	lbs/hr	64.0	tons/yr
Sulfur Dioxide	128.2	lbs/hr	561.5	tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	51.0	lbs/hr	223.8	tons/yr
Carbon Monoxide	3.1	lbs/hr	13.5	tons/yr
Volatile Organic Compounds	0.6	lbs/hr	2.7	tons/yr
Hydrogen Chloride	5.38	lbs/hr	23.6	tons/yr
Lead	0.04	lbs/hr	0.18	tons/yr

(9 VAC 5-80-110 and Condition 8 of 11/26/03 Permit)

- Visible emissions from each of the No. 3 boiler exhaust shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-50-80, 9 VAC 5-50-260, and Condition 9 of 11/26/03 Permit)
- 8. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Maintain an inventory of spare parts.
  - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
  - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training, and the nature of training.

Records of maintenance and training shall be maintained on the site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20 E and Condition 16 of 11/26/03 Permit)

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

(9 VAC 5-170-160) - General Administration, Conditions on Approval

During boiler startup, the permittee may use oil, oily rags, used oil absorbents, and wood scraps generated at the Georgia-Pacific Wood Products LLC – Jarratt plant as an acceptable alternative to the manufacturer's recommended materials for providing the initial fire to the boiler prior to combustion of coal.

#### MACT, Subpart DDDDD

40 CFR 63.7495

No. 3 boiler shall be operated in accordance with 40 CFR 63 Subparts A and DDDDD. Unless otherwise specified by 40 CFR 63 Subparts A and DDDDD, the requirements of 40 CFR 63 Subparts A and DDDDD (including any such requirements included in this permit) are not effective until September 13, 2007 (unless an alternative date is approved by the Administrator).

40 CFR 63.7500(a)

**Emission limits:** 

Particulate Matter = 0.07\* lbs/MMBtu Total Selected Metals = 0.001\* lbs/MMBtu Hydrogen Chloride = 0.09 lbs/MMBtu Mercury = 0.000009 lbs/MMBtu

\*The permittee has the option to meet the PM emission limit of 0.07 lbs/MMBtu OR TSM emission limit of 0.001 lbs/MMBtu.

Opacity: Shall not exceed 20 percent opacity, except during one sixminute period in any one hour in which visible emissions shall not exceed 27 percent opacity.

#### **B.** Monitoring

# Periodic Monitoring Demonstration

The following chart delineates the periodic monitoring requirements for the No. 3 Keeler boiler:

Periodic Monitoring Requirements for No. 3 Keeler						
Limitations	Parameter	Monitoring	Record Keeping	Reporting		
Particulate emissions controlled by two (2) multicyclones in series	Control equipment operation, differential pressure across multi cyclones	Annual inspection of cyclones to ensure structural integrity; Establishment of baseline differential pressure across multicyclones, inspection if actual differential pressure falls below 80% of baseline	Differential pressure readings across multicyclones, results of multiclone inspections			
Fuel allowed is coal; sulfur and ash content not to exceed 1.0 and 8.8 percent by weight,	Boiler construction and design.	none needed	Fuel Throughput Records, coal shipments purchased, including sulfur & ash content,	none needed		

Periodic Monitorin	g Requirements for N	o. 3 Keeler		
Limitations	Parameter	Monitoring	Record Keeping	Reporting
respectively.			and heating value, per shipment	
Hourly and annual emissions limitations for the boilers.	Boiler rating; Fuel characteristics; Emission factors from AP-42; Formulas	factors from AP-42, and for	d formulas, boiler ratings, fue ormulas to show that the boil S DEMONSTRATION BELC	er cannot exceed these
Control of boiler emissions through proper operation and maintenance.	Good written operating procedures; Maintenance schedule;	n/a	Maintain maintenance schedule on site. Records of maintenance and repair; Copy of operating procedures on site.	N/a
Boiler maximum rated capacity of 86.61 MMBtu/hr	Steam flow and steam operating pressure to be maintained at or below 85,000 lb/hr and 340 psig, respectively	Steam flow, pressure, and feedwater temperature shall be continuously monitored to show hourly compliance (1-hr avg. with measurements taken not more than 15 minutes apart)	Records of steam flow, operating steam pressure, and feedwater temperature to verify compliance with 86.61 MMBtu/hr boiler rating	N/a
9 VAC 5-50-80 opacity standards	Visible emissions and opacity	Weekly visual inspection with Method 9 follow-up observation of apparent abnormal opacity condition.	Results of visual observations, cause of any abnormal and excess visible emissions, corrective action	Report results of any Method 9 observation, and cause and duration of excess emissions, as well as corrective action taken.

Conditions have been added to the TV permit to reflect the above chart. Monitoring conditions to be added for TV periodic monitoring demonstrations (9 VAC 5-80-110 B) are as follows:

 Weekly visual observation of the boiler stack, with Method 9 follow-up when apparent abnormal condition is noted.

\*\*Note: Since the COMS will be effective September 13, 2007 and will be a <u>continuous reading</u> of opacity, it was decided that the weekly observations would not be needed. Therefore, this sentence was added, "These weekly observations shall be in effect until the COM system is effective on September 13, 2007 (unless an alternative date is approved by the Administrator)."

#### MACT, Subpart DDDDD

40 CFR 63.7525(b)

The permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to monitor and record the opacity of emissions discharged into the atmosphere from the No. 3 boiler according to 40 CFR 63.7525(b). Data shall be reduced to six minute averages. The permittee shall develop and implement a COMS quality control program according to §63.8(d). As part of the quality control program, the permittee

shall develop and submit to the Director, Piedmont Regional Office for approval upon request a site-specific performance evaluation test plan for the COMS performance evaluation required in §63.8(e)).

# C. Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. The following record keeping requirements are for the purposes of periodic monitoring (9 VAC 5-80-110):

- Required to keep fuel quality and usage records (tons of coal throughput, sulfur and ash content).
- Records of boiler ratings, fuel characteristics and formulas to provide compliance with emission limits.
- Maintain a copy of the operating procedures on site.

#### MACT, Subpart DDDDD

40 CFR 63.7555:

- Each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD.
- Records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations.
- For the COM required for opacity:
  - o Records described in §63.10(b)(2)(vi) through (xi)
  - Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii)
  - Previous versions of the performance evaluation plan as required in §63.8(d)(3)
  - Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- Records of all opacity monitoring data and calculated opacity averages to show continuous compliance with the opacity limit in Condition III.A.8.
- A copy of all calculations and supporting documentation that were done to demonstrate compliance through performance testing

(maximum chlorine/TSM/mercury fuel input) or fuel analysis (hydrogen chloride/TSM/mercury emission rates).

40 CFR 63.7505(e))

The permittee shall maintain a written startup, shutdown, and malfunction (SSM) plan as stated in §63.6(e) that describes, in detail, procedures for operating and maintaining the No.3 boiler during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standards limited by this permit.

#### D. Testing

The following conditions are from the Commonwealth of Virginia's *Regulations for the Control and Abatement of Air Pollution:* 

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-50-30, 9 VAC 5-80-110)
- If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# MACT, Subpart DDDDD

40 CFR 63.7505(c,d), 63.7510(d), 63.7521(b), and 63.7545(d)

The permittee shall demonstrate initial compliance for the PM or TSM. hydrogen chloride, and mercury lbs/MMBtu limits in Condition III.A.7 using fuel analysis (according to §63.7521 and Table 6 of 40 CFR 63, Subpart DDDDD) or through performance testing (according to §63.7520 and Table 5 of 40 CFR 63, Subpart DDDDD). The permittee must demonstrate initial compliance no later than 180 days after the compliance date (9/13/2007). If demonstrated through fuel analysis, the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval no later than 60 days before the date intended to demonstrate compliance. If the fuel analysis calculated emission rate is greater than the applicable emission limit, then the permittee must demonstrate compliance using performance testing. If demonstrated through performance testing, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled and develop a site specific monitoring plan according to the requirements in 40 CFR 63.7505(d). During either the fuel analysis or performance testing, the permittee shall establish operating limits according to §63.7530 and Tables 7 and 8 of 40 CFR 63, Subpart DDDDD.

40 CFR 63.7515(a-d)

The permittee shall conduct all applicable performance tests according to §63.7520 on an annual basis. Annual performance tests must be completed between 10 and 12 months after the previous performance

test, unless the permittee follows the requirements listed below:

- a. The permittee can conduct performance tests less often for a given pollutant if the performance test for the pollutant (particulate matter, TSM, hydrogen chloride, or mercury) for at least 3 consecutive years shows that they comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.
- b. If the No. 3 boiler continues to meet the emission limit for particulate matter, TSM, hydrogen chloride, or mercury, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.
- c. If a performance test shows noncompliance with an emissions limit for particulate matter, TSM, hydrogen chloride, or mercury, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

40 CFR 63.7515(f)

Every five years after the first fuel analysis was completed, the permittee must conduct a fuel analysis according to §63.7521 for coal burned in the No. 3 boiler.

# E. Reporting

To support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit, the following conditions regarding reporting have been placed in the TV permit.

- Report annual fuel throughput (coal) and emissions (calendar year).
- Report the results of any Method 9 visible emissions evaluations.

# MACT, Subpart DDDDD

40 CFR 63.7545(e)	In accordance with 40 CFR 63.9(h)(2)(ii), the permittee shall complete and submit each Notification for Compliance Status (NOCS) required by 40 CFR 63.7545(e). Each NOCS shall contain the information specified in 40 CFR 63.7545(e)(1-9), as applicable, and be submitted before the close of business on the 60 <sup>th</sup> day following the completion of the performance test and/or other initial compliance demonstration.
40 CED 62 7550	The permittee shall submit semi appual reports to the Diadment Degional

40 CFR 63.7550 The permittee shall submit semi-annual reports to the Piedmont Regional Office within 30 days after the end of each calendar 6 month period according to 40 CFR 63.7550.

40 CFR 63.7515(g)

The permittee shall report the results of the performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for

the No. 3 boiler have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to 40 CFR 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in §63.7550.

40 CFR 63.7540(b)

The permittee shall report each instance in which they did not meet each emission limit, operating limit, and work practice standards in Tables 1 through 4 of 40 CFR, Subpart DDDDD that apply to the No. 3 boiler. The permittee must also report each instance during a startup, shutdown, or malfunction when they did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards and must be reported according to the requirements in §63.7550.

# F. Streamlined Requirements

Boiler permit is current and requirements have been updated.

# EMISSION UNIT APPLICABLE REQUIREMENTS – (Chip Process, including cyclones, emission unit ID #E-CP-2 through E-CP-6, F-CP-1 and F-CP-4)

The chip process consists of existing equipment that does not have any permit-related applicable requirements. The only requirements placed upon the process by the Title V permit are the existing source visible emissions limits, and the grain loading requirements of Rule 4-17: <u>Emission Standards for</u> Woodworking Operations.

#### A. Limitations

- Visible emissions from the Chip Process, including cyclones (EU ID#E-CP-2 through E-CP-6, F-CP-1 and F-CP-4) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
   (9 VAC 5-40-80 and 9 VAC 5-80-110)
- Emissions from the operation of the Chip Process, including cyclones (EU ID #E-CP-2 through E-CP-6, F-CP-1 and F-CP-4) shall not exceed the limits specified below:

Particulate Matter	0.05	gr/dscf	(9 VAC 5-40-2270)
PM-10	0.05	gr/dscf	(9 VAC 5-40-2270)

(9 VAC 5-40-2270 and 5-80-110)

# **B.** Monitoring

Monitoring to be added for TV periodic monitoring demonstration (9 VAC 5-80-110 B) as follows:

Weekly visual observation of the Chip Process (EU ID #E-CP-2 through E-CP-6, F-CP-1 and F-CP-4), with Method 9 follow-up when apparent abnormal condition is noted.

# C. Recordkeeping

The following record keeping requirements are for the purposes of periodic monitoring (9 VAC 5-80-110):

- Required to keep records of throughput
- Required to keep records of any visible emissions evaluations

#### D. Testing

The permit does not require source tests for the chip process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following conditions are from the Commonwealth of Virginia's Regulations for the Control and Abatement of Air Pollution:

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using

appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations. (9 VAC 5-50-30, 9 VAC 5-80-110)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# E. Reporting

To support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit, the following conditions regarding reporting will be placed in the TV permit.

- Report throughput and emissions (calendar year)
- Report the results of any Method 9 visible emissions evaluations

# F. Streamlined Requirements

The process weight rule (Rule 4-4: <u>Emission Standards for General Process Operations</u>) could be applicable to the chip process, but would allow excessive emissions. The 0.05 gr/scf standard contained in the woodworking rule (Rule 4-17) is more stringent.

# EMISSION UNIT APPLICABLE REQUIREMENTS – (Dryer (Zones 1, 2, and 3), EU ID #E-PL-11 through E-PL-13)

The Dryer (Zones 1-3) consists of existing equipment that does not have any permit-related applicable requirements, but does have a Consent Order dated 9/28/1998 (as amended on 4/28/2000).

#### A. Limitations

#### **Consent Order**

1. Visible emissions from the Zone 1 and Zone 2 Dryer stacks shall not exceed 50 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.

(Condition E.1 of 9/28/98 Consent Order, as amended on 4/28/00)

#### Rule 4-4

2. Emissions from the operation of each of the Dryer (Zones 1 and 2) stacks shall not exceed the limits specified below:

Particulate Matter	22.6	lbs/hr	(9 VAC 5-40-260A)
PM-10	22.6	lbs/hr	(9 VAC 5-40-260A)

(9 VAC 5-40-260)

\*\*Note: This Condition is taken from Rule 4-4 (Emission Standards for General Process Operations). VOC is not limited because the facility lies outside the Richmond VOC control area (formerly the Richmond nonattainment area for VOC)

# **B.** Monitoring

# Periodic Monitoring Demonstration

1. The Zone 1 and Zone 2 dryer stacks shall be observed visually at least once each calendar week to determine if visible emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-80-110 E)

#### Consent Order

2. In addition to the visual observations required by Condition V.B.1, the permittee shall conduct

quarterly visible emissions evaluations on Zone 1 and Zone 2 Dryer Stacks using 40 CFR 60, Appendix A Method 9, when valid Reference Method 9 parameters can be obtained. Records of these visible emissions evaluations shall be maintained on site and made available for inspection or submitted to DEQ upon request.

(Condition E.2 of 9/28/98 Consent Order, as amended 4/28/00)

3. The permittee shall perform Method 5 and Method 202 stack tests on Zone 1 and Zone 2 Dryer stacks once every two years. If two consecutive tests show that the particulate emissions are acceptable, the interval between tests may be lengthened subject to approval by the Director, Piedmont Region.

(Condition E.3 of 9/28/98 Consent Order, as amended 4/28/00)

#### C. Recordkeeping

The following record keeping requirements are for the purposes of periodic monitoring (9 VAC 5-80-110):

- Required to keep records of differential pressure readings across the gas scrubber, and scrubber maintenance records.
- Required to keep records of throughput and emission data.
- Required to keep records of visible emissions observations, and any subsequent Method 9 visible
  emission evaluations, the cause of any abnormal and excess visible emissions, corrective
  measures taken to correct the excess visible emissions, and records of conditions which prevent
  Method 9 visible emission evaluations in the event of an apparently abnormal visible emission
  condition.
- Required to keep records of any emissions testing.

# D. Testing

The permit does not require source tests for the chip process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following conditions are from the Commonwealth of Virginia's Regulations for the Control and Abatement of Air Pollution:

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-50-30, 9 VAC 5-80-110)
- If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

#### E. Reporting

To support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit, the following

conditions regarding reporting will be placed in the TV permit.

- Report throughput and emissions (calendar year)
- Report the results of any Method 9 visible emissions evaluations
- Report the results of any stack test performed in accordance with Condition V.B.3 within 45 days of the test. The following language was added at the request of the source:

\*\*Note: If two consecutive tests show that the particulate emissions are acceptable, the interval between tests may be lengthened subject to approval by the Director, Piedmont Region.

#### EMISSION UNIT APPLICABLE REQUIREMENTS - Trim Saws (EU ID#E-TS-1)

The trim saws do not have any permit-related applicable requirements. The only requirements placed upon the process by the Title V permit are the existing source visible emissions limits, and the grain loading requirements of Rule 4-17: <u>Emission Standards for Woodworking Operations</u>. The installation of the trim saws was determined to be exempt from permit requirements.

#### A. Limitations

- Visible emissions from the trim saws/Ducon dust collector (EU ID#E-TS-1 and E-PL-39) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. (9 VAC 5-40-80 and 9 VAC 5-80-110)
- Emissions from the operation of the trim saws (EU ID #E-TS-1) shall not exceed the limits specified below:

Particulate Matter	0.05	gr/dscf	(9 VAC 5-40-2270)
PM-10	0.05	gr/dscf	(9 VAC 5-40-2270)
(9 VAC 5-40-2270 and 5-80-110)			

# **B.** Monitoring

Monitoring added for TV periodic monitoring demonstration (9 VAC 5-80-110 B) as follows:

Weekly visual observation of the trim saws/Ducon dust collector (EU ID #E-TS-1), with Method 9 follow-up when apparent abnormal condition is noted.

# C. Recordkeeping

The following record keeping requirements are for the purposes of periodic monitoring (9 VAC 5-80-110):

- Required to keep records of throughput.
- Required to keep records of any visible emissions evaluations.

# D. Testing

The permit does not require source tests for the chip process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following conditions are from the Commonwealth of Virginia's *Regulations for the Control and Abatement of Air Pollution:* 

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-50-30, 9 VAC 5-80-110)
- If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# E. Reporting

To support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit, the following conditions regarding reporting will be placed in the TV permit.

- Report throughput and emissions (calendar year).
- Report the results of any Method 9 visible emissions evaluations.

# F. Streamlined Requirements

The process weight rule (Rule 4-4: <u>Emission Standards for General Process Operations</u>) could be applicable to the trim saws, but would allow excessive emissions. The 0.05 gr/scf standard contained in the woodworking rule (Rule 4-17) is more stringent.

#### EMISSION UNIT APPLICABLE REQUIREMENTS - Paint Spray Booth (EU ID# EP-16)

The following limitations for the Paint Spray Booth originate from the 7/22/94 NSR permit except that the "paper" filters originally specified in Condition 1 of the 1994 permit have been changed to "appropriate" filters, since the facility no longer uses paper filters. This does not increase the emissions of the spray booth.

#### A. Limitations

#### 7/22/1994 NSR permit

- Particulate emissions from the spray booth shall be controlled by appropriate filters and operational techniques to minimize over spray. The spray booth shall be provided with adequate access for inspection. The filter shall be equipped with a device to measure the differential pressure drop across the filter during periods of operation. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. (9 VAC 5-80-110 and Condition 2 of the 7/22/94 Permit)
- Volatile Organic Compound emissions from the spray booth shall be minimized by using low VOC coatings containing no more than 0.005 lb VOC/gal, as applied.
   (9 VAC 5-80-110 and Condition 5 of the 7/22/94 Permit)
- The spray booth shall consume no more than 200,000 gallons of coating per year, calculated as the sum of each consecutive 12-month period.
   (9 VAC 5-80-110 and Condition 6 of the 7/22/94 Permit)
- Visible emissions from the spray booth shall not exceed five (5) percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
   (9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 9 of the 7/22/94 Permit)
- 5. Emissions from the operation of the spray booth shall not exceed the limits specified below:

Particulate Matter	6.0	lbs/hr	6.0	tons/yr	(9 VAC 5-50-260)
PM-10	6.0	lbs/hr	6.0	tons/yr	(9 VAC 5-50-260)
Volatile Organic Compounds	0.3	lbs/hr	0.5	tons/yr	(9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 9 of the 7/22/94 Permit)

# **B.** Monitoring

#### 7/22/1994 NSR permit

 The permittee shall perform weekly checks of the filters and maintain records of results and any repairs or replacements.

(9 VAC 5-80-1180 and Condition 2 of 7/22/94 Permit)

\*\*Note: This condition was taken from the 7/22/94 permit, except the word "paper" (filter) was deleted in favor of the following, since the facility no longer uses paper filters.

# Periodic Monitoring Demonstration

2. The spray booth emissions shall be observed visually at least once each calendar week (when the paint spray booth is in operation) for at least a brief time period to determine whether the visible emissions are normal. If the spray booth is observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-50-20)

#### C. Recordkeeping

The following record keeping requirements are for the purposes of periodic monitoring (9 VAC 5-80-110):

- Required to keep records of filter repair and replacement.
- Required to keep records of throughput and emission data.
- Required to keep records of visible emissions observations.

#### D. Testing

The permit does not require source tests for the chip process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following conditions are from the Commonwealth of Virginia's *Regulations for the Control and Abatement of Air Pollution:* 

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-50-30, 9 VAC 5-80-110)
- If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

#### E. Reporting

To support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit, the following conditions regarding reporting will be placed in the TV permit.

Report the results of any Method 9 visible emissions evaluations

# EMISSION UNIT APPLICABLE REQUIREMENTS - Hot Roll Coating Operation (EU ID#HR-1)

There are two sources of specific applicable requirements for the Hot Roll Coating Operation: The 7/22/2005 NSR permit and 40 CFR 63, Subpart QQQQ.

#### A. Limitations

#### 7/22/05 NSR Permit

- Volatile organic compounds shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
   VAC 5-80-110 and Condition 3 of the 07/22/05 Permit)
- 2. The production of softboard panels using prepress sealer shall not exceed 73.60 MMSF per year, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition 4 of the 07/22/05 Permit)
- Organic Hazardous Air Pollutant emissions from the operation of the hot roll coating operation shall not exceed 0.48 lb HAP/gallon. When the compliant material compliance option is used, thinners and cleaning materials shall contain no organic HAP.
   (9 VAC 5-80-110 and Condition 6 of the 07/22/05 Permit)
- 4. Emissions from the operation of the hot roll coating operation shall not exceed the limits specified below:

Volatile Organic Compounds 4.24 lbs/hr 18.62 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number VIII.A.2.

(9 VAC 5-80-110 and Condition 5 of the 07/22/05 Permit)

 Except where this permit is more restrictive, the hot roll coating operation shall be operated in compliance with the requirements of 40 CFR 63, Subpart QQQQ. (9 VAC 5-80-110 and Condition 7 of the 07/22/05 Permit)

# MACT, Subpart QQQQ

The facility shall be subject to the General Provisions (Subpart A) of 40 CFR 63 as outlined in the table below:

> Table 1 to Subpart QQQQ of 40 CFR 63: General Provisions Applicability to Subpart QQQQ

Reference	Subject	Applies to Subpart QQQQ	Comment

Reference	Subject	Applies to Subpart QQQQ	Comment
63.1(a)(1)-(a)(14)	General Applicability	Yes.	
63.1(b)(1)-(3)	Initial Applicability Determination	Yes.	Applicability to Subpart QQQQ is also in § 63.4681.
63.1(c)(1)	Applicability After Standard Established	Yes.	
63.1(c)(2)-(3)	Applicability of Permit Program for Area Sources	No.	Area sources are not subject to Subpart QQQQ.
63.1(c)(4)-(5)	Extensions and Notifications	Yes.	
63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes.	
63.2	Definitions	Yes.	Additional definitions are specified in § 63.4781.
63.3(a)-(c)	Units and Abbreviations	Yes.	3 20 0
63.4(a)(1)-(5)	Prohibited Activities	Yes.	
63.4(b)-(c)	Circumvention/ Severability	Yes.	
63.5(a)	Construction/ Reconstruction	Yes.	
63.5(b)(1)-(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes.	
63.5(d)	Application for Approval of Construction/ Reconstruction	Yes.	
63.5(e)	Approval of Construction/ Reconstruction	Yes.	
63.5(f)	Approval of Construction/ Reconstruction Based on Prior State Review	Yes.	
63.6(a)	Compliance with Standards and Maintenance Requirements	Yes.	
63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes.	§ 63.4683 specifies the compliance dates
63.6(c)(1)-(5)	Compliance Dates for Existing Sources	Yes.	§ 63.4683 specifies the compliance dates
63.6(e)(1)-(2)	Operation and Maintenance	No	Section reserved.
63.6(e)(3)	SSMP	Yes.	Only sources using an add-on control device to comply with the standard must complete SSMP.
63.6(f)(1)	Compliance Except During SSM	Yes.	Applies only to sources using add- on control device to comply.

Reference	Subject	Applies to Subpart QQQQ	Comment
63.6(f)(2)-(3)	Methods for Determining Compliance	Yes.	
63.6(g)(1)-(3)	Use of an Alternative Standard	Yes.	Subpart KK does not require COMS.
63.6(h)	Compliance with Opacity/Visible Emission Standards	No.	Subpart QQQQ does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
63.6(i)(1)-(16)	Extension of Compliance	Yes.	
63.6(j)	Presidential Compliance Exemption	Yes.	
63.7(a)(1)	Performance Test Requirements	Yes.	Applies to all affected sources. Additional requirements for performance testing specified in §§ 63.4764, 63.4765, and 63.4766.
63.7(a)(2)	Performance Test Requirements-Dates	Yes.	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard.
63.7(a)(3)	Performance Tests required by the Administrator	Yes.	
63.7(b)-(e)	Performance Test Requirements	Yes.	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard.
63.7(f)	Use of Alternative Test Methods	Yes.	Applies to all test methods except those used to determine capture system efficiency.
63.7(g)-(h)	Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes.	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard.
63.8(a)(1)-(3)	Monitoring Requirements- Applicability	Yes.	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional standards for monitoring are specified in § 63.4768.
63.8(a)(4)	Additional Monitoring Requirements	No.	Subpart QQQQ does not require COMS
63.8(b)	Conduct of Monitoring	Yes.	Provisions for COMS are not applicable.
63.8(c)(1)-(3)	CMS Operation and Maintenance	Yes.	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional standards for monitoring are specified in § 63.4768.
63.8(c)(4)	CMSs	No.	§ 63.4768 specifies the

		Applies to	
Reference	Subject	Subpart QQQQ	Comment
			requirements for the operation of
			CMS for capture systems and add-
			on control devices at sources using
			these to comply.
63.8(c)(5)	COMS	No.	Subpart QQQQ does not have
33.3(3)(3)	000		opacity for visible emission
			standards.
63.8(c)(6)	CMS Requirements	No.	§ 63.4768 specifies the
33.3(3)(3)	ome requirement		requirements for the operation of
			CMS for capture systems and add-
			on control devices at sources using
			these to comply.
63.8(c)(7)	CMS Out-of-Control	Yes.	Initial notification submission date
33.3(3)(.)	periods		extended.
63.8(c)(8)	CMS Out-of-Control	No.	§ 63.4720 requires reporting of
00.0(0)(0)	Periods Reporting	110.	CMS out-of-control periods.
63.8(d)-(e)	Quality Control	No	Subpart QQQQ does not require the
00.0(u)-(c)	Program	140	use of continuous emissions
	i Togram		monitoring systems.
63.8(f)(1)-(5)	Use of an Alternative	Yes.	monitoring systems.
03.0(1)(1)-(3)	Monitoring Method	165.	
63.8(f)(6)	Alternative to Relative	No.	Subpart QQQQ does not require the
03.0(1)(0)	Accuracy Test	INO.	use of continuous emissions
	Accuracy rest		monitoring systems.
62.0(a)(1) (5)	Data Reduction	No.	
63.8(g)(1)-(5)	Data Reduction	NO.	§§ 63.4767 and 63.4768 specify
63 0(a) (d)	Notification Req'mts	Yes.	monitoring data reduction.
63.9(a)-(d) 63.9(e)	Notification of	Yes.	Applies only to centure evetem and
03.9(e)	Performance Test	165.	Applies only to capture system and
	Performance rest		add-on control device performance tests at sources using these to
63 O(f)	Notification of	No	comply with the standard.
63.9(f)		No.	Subpart QQQQ does not have
	VE/Opacity Test		opacity or visible emission
62.0(~)(1).(2)	Add'l Notification When	No.	standards.  Subpart QQQQ does not require the
63.9(g)(1)-(3)		NO.	use of continuous emissions
	Using CMS		
			monitoring systems.
62 O/h)	Notification of	Voc	S 62 4710 appoifies the dates for
63.9(h)	Notification of	Yes.	§ 63.4710 specifies the dates for submitting the notification of
	Compliance Status		
63 0(i)	Adjustment of Cubmittel	Voc	compliance status.
63.9(i)	Adjustment of Submittal	res.	
C2 O(i)	Deadlines	Vac	
63.9(j)	Change in Previous	Yes.	
02.40(=)	Information	Vaa	
63.10(a)	Recordkeeping/	Yes.	
00.40(1)(1)	Reporting		A 1 199
63.10(b)(1)	General Recordkeeping	Yes.	Additional requirements are
			specified in §§ 63.4730 and
00.40(1.)(2)(2) ( )	<del> </del>		63.4731.
63.10(b)(2)(i)-(v)	Recordkeeping relevant	Yes.	Requirements for SSM records only
	to SSM		apply to add-on control devices used

Reference	Subject	Applies to Subpart QQQQ	Comment
00.40(1)(0)()()			to comply with the standard.
63.10(b)(2)(vi)-(xi)	December	Yes.	
63.10(b)(2)(xii) 63.10(b)(2)(xiii)	Records	Yes. No.	Subpart QQQQ does not require opacity and visible emissions evaluations.
63.10(b)(2)(xiv)		Yes.	
63.10(b)(3)	Recordkeeping requirements	Yes.	
63.10(c)(1)-(6)	Add'l Recordkeeping Req'mts for Sources with CMS	Yes.	
63.10(c)(7)-(8)		No.	The same records are required in § 63.4720(a)(7).
63.10(c)(9)-(15)		Yes.	
63.10(d)(1)	General Reporting Requirements	Yes.	Additional requirements are specified in § 63.4720.
63.10(d)(2)	Report of Performance Test Results	Yes.	Additional requirements are specified in § 63.4720(b).
63.10(d)(3)	Reporting VE Observations	No.	Subpart QQQQ does not require opacity or visible emissions observations.
63.10(d)(4)	Progress Reports for Sources with Compliance Extensions	Yes.	
63.10(d)(5)	SSM Reports	Yes.	Applies only to add-on control devices at sources using these to comply with the standard.
63.10(e)(1)-(2)	Additional CMS Reports	No.	Subpart QQQQ does not require the use of continuous emissions monitoring systems.
63.10(e)(3)	Excess Emission Reports	No.	§ 63.4720 (b) specifies the contents of periodic compliance reports.
63.10(e)(4)	COMS Data Reports	No.	Subpart QQQQ does not specify requirements for opacity or COMS.
63.10(f)	Recordkeeping/ Reporting Waiver	Yes.	
63.11	Control Device Requirements/Flares	No.	Subpart QQQQ does not specify the use of flares for compliance.
63.12	State Authority and Delegations	Yes.	
63.13	Addresses	Yes.	
63.14	Incorporation by Reference	Yes.	Test Methods ANSI/ASME PTC 19.10-1981, ASTM D2697-86 (Reapproved 1998), ASTM D6093- 97 (incorporated by reference, see § 63.14).
63.15	Availability of Information	Yes.	

(9 VAC 5-60-90)

# **B.** Monitoring

#### 7/22/05 NSR Permit

- The initial compliance period begins on the date of startup and ends on the last day of the 12<sup>th</sup> month following startup. If startup occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months.
   (9 VAC 5-80-110 and Condition 8 of the 07/22/05 Permit)
- 2. The permittee must use either the compliant material option or the emission rate without add-on controls option for the hot roll coating operation. For the compliant material option, the initial compliance demonstration includes the calculations according to 40 CFR 63.4741 and supporting documentation showing that during the initial compliance period, no coating was used with an organic HAP content that exceeded the emission limit contained in Condition VII.A.3, and that no thinners or cleaning materials were used that contained organic HAP. For the emission rate without add-on controls option, the permittee shall determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate a 12-month organic HAP emission rate at the end of the initial 12-month compliance period. The initial compliance demonstration includes the calculations according to 40 CFR 63.4751 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limit contained in Condition VII.A.3.
  (9 VAC 5-80-110 and Condition 9 of the 07/22/05 Permit)
- 3. To demonstrate continuous compliance (with the compliant material option), the permittee shall use no coating for which the organic HAP content determined using Equation 2 of 40 CFR 63.4741exceeds the emission limit contained in Condition VII.A.4.

$$H_c = \frac{(D_c)(W_c)}{V_s}$$

Where:

 $H_c$  = Organic HAP content of the coating, grams organic HAP per liter coating solids.

 $D_c$  = Density of coating, grams coating per liter coating, determined according to test results using ASTM Method D1475-90 or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475-90 test results and the supplier's or manufacturer's information, the test results will take precedence.

 $W_c$  = Mass fraction of organic HAP in the coating, grams organic HAP per gram coating, determined according to 40 CFR 63.4741(a).

 $V_s$  = Volume fraction of coating solids, liter coating solids per liter coating, determined according to 40 CFR 63. 4741(b).

A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Condition VIII.B.1 is the end of a compliance period consisting of that month and the preceding 11 months.

(9 VAC 5-80-110 and Condition 10 of the 07/22/05 Permit)

4. To demonstrate continuous compliance (with the emission rate without add-on controls option), the organic HAP emission rate for each compliance period, calculated using Equation 3 of 40 CFR 63.4751, must be less than or equal to the emission limit contained in Condition VIII.A.3. A compliance period consists of 12 months. Each month after then end of the initial compliance period described in Condition VIII.B.1 is the end of a compliance period consisting of that month and the preceding 11 months.

(9 VAC 5-80-110 and Condition 11 of the 07/22/05 Permit)

# C. Recordkeeping

#### 7/22/05 NSR Permit

- Annual production in square feet of softboard panels processed by the hot roll coating operation calculated monthly as the sum of each consecutive 12-month period.
- Monthly and annual emissions in pounds of HAP. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

#### MACT, Subpart QQQQ

- A copy of each notification and report submitted in compliance with 40 CFR 63 Subpart QQQQ.
- A current copy of information provided by materials suppliers or manufacturers, including but not limited to the manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If the permittee conducts testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, then a copy of the complete test report is required. If information is provided by the manufacturer or supplier, the permittee may keep only the summary sheet of results provided by the manufacturer or supplier. In that case, the permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- For each compliance period, the permittee shall keep the following records:
  - 1. A record of the coating operations at which each compliance option was used and the time periods (beginning and ending dates and times) that each option was used.
  - 2. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.4741.
  - 3. For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used each month, using Equations 1, 1A through C, and 2 of 40 CFR 63.4751; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.4751(e)(4); the calculation of the total volume of coating solids used each month, using Equation 2 of 40 CFR 63.4751; and the calculation of each 12-month organic HAP emission rate, using Equation 3 of 63.4751.
- A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.

- A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
- A record of the volume fraction of coating solids for each coating used during each compliance period.
- A record of the density for each coating used during the compliance period; and, if the emission
  rate without add-on control option is used, the density for each thinner and cleaning material used
  during each compliance period.
- If an allowance is used in Equation 1 of 40 CFR 63.4751 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.4751(e)(4), the following records must be kept:
  - 1. The name and address of each TSDF to which waste materials for which an allowance was taken were sent; a statement of which subparts under 40 CFR parts 262, 264, 265 and 266 apply to the facility; and the date of each shipment.
  - 2. Identification of the coating operations producing waste materials included in each shipment and the month or months in which the allowance was taken for these materials in Equation 1 of 40 CFR 63.4751.
  - 3. The methodology used in accordance with 40 CFR 63.4751(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- Records of the date, time, and duration of each deviation from the standard contained in Condition VIII.A.3.

# D. Testing

The permit does not require source tests for the chip process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following conditions are from the Commonwealth of Virginia's *Regulations for the Control and Abatement of Air Pollution:* 

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-50-30, 9 VAC 5-80-110)
- If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# E. Reporting

<u>7/22/05 NSR Permit (and to support the periodic monitoring requirements (9 VAC 5-80-110 B) of the TV permit)</u>

Semiannual compliance reporting

- The permittee shall submit semiannual compliance reports for the hot roll coating operation
  according to the following requirements. The semiannual compliance reporting requirements may
  be satisfied by reports required under 40 CFR Part 70 when the facility obtains a Title V permit, as
  specified in Condition VIII.E.1.b.
  - Unless otherwise approved by the Director, Piedmont Region, the permittee shall prepare and submit each semiannual compliance report according to the dates specified in Condition VIII.E.1.a(1)-(4):
    - The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in Condition VIII.B.1 that applies to the hot roll coating operation and ends on June 30 or December 1, whichever occurs first following the end of the initial compliance period.
    - 2. Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 to December 31.
    - 3. Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  - b. Each facility that has obtained a title V operating permit pursuant to 40 CFR part 70 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If a facility submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the facility may have to report deviations from permit requirements to DEQ.
  - c. The semiannual compliance report must contain the information specified in Condition VIII.E.1.c(1)-(5), and the information that is specified in Condition VIII.E.1.d-f that is applicable for the compliance period.
    - 1. Company name and address.
    - 2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
    - 3. Date of the report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information

- reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- 4. Identification of the compliance option or options used during the reporting period. If the permittee switched between compliance options during the reporting period, the report must include the beginning and ending dates that each option was used.
- 5. If the emission rate without add-on controls option was used, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
- d. **No deviations.** If there were no deviations from the emission limitations in Condition VIII.A.3, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
- e. **Deviations: compliant material option.** If the compliant material option was used, and there was a deviation from the emission limit contained in Condition VIII.A.3, the semiannual compliance report must contain the following information:
  - Identification of each coating used that deviated from the emission limit, each thinner or cleaning material used that contained organic HAP, and the dates and time periods each was used.
  - 2. The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.4741) for each coating identified in Condition VIII.E.1.e (1). It is not necessary to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
  - 3. The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified in Condition VIII.E.1.e(1). It is not necessary to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
  - 4. A statement of the cause of each deviation.
- f. **Deviations: emission rate without add-on controls option.** If the emission rate without add-on controls option was used, and there was a deviation from the emission limit contained in Condition VIII.A.3, the semiannual compliance report must contain the following information:
  - 1. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the emission limit contained in Condition VIII.A.3.
  - 2. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, to include the calculations for Equations 1, 1A through 1C, 2, and 3 in 40 CFR 63.4751; and if applicable, the calculation used to determine the mass of organic HAP in waste materials according to 40 CFR 63.4751(e)(4). It is not necessary to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

#### **Comments on General Conditions**

# **B.** Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

This general condition cite(s) the Article(s) that follow(s):

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow: 9 VAC 5-80-80. Application 9 VAC 5-80-140. Permit Shield 9 VAC 5-80-150. Action on Permit Applications

# F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows: 40 CFR 60.13 (h). Monitoring Requirements.

#### J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in

Prevention of Significant Deterioration Areas 9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

#### U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow: 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction 9 VAC 5-80-110. Permit Content

#### **FUTURE APPLICABLE REQUIREMENTS**

No Future Applicable Requirements have been identified for this facility.

# **INAPPLICABLE REQUIREMENTS**

As originally constructed, this boiler would have been subject to the requirements of NSPS Subpart Db (>100 MMBtu/hr), but construction preceded the effective date of June 19, 1984.

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

# **COMPLIANCE PLAN**

Currently no compliance plan has been submitted by the permittee. This situation may change pending review of recent compliance tests conducted by the facility.

# **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation <sup>1</sup> (9 VAC	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
F-CP-2	Vibrating Screen	5-80-720 B	PM, PM-10	120 tons/hr
F-CP-3A	Accepts Conveyor	5-80-720 B	PM, PM-10	120 tons/hr
F-CP-3B	Transfer Conveyor	5-80-720 B	PM, PM-10	120 tons/hr
F-CP-5	NW Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-6	NC Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-7	NE Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-8	SW Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-9	SC Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-10	SE Wood Chip Pile	5-80-720 B	PM, PM-10	60 tons/hr
F-CP-11	Reclaim Hopper	5-80-720 B	PM, PM-10	60 tons/hr
E-PP-7	Vent, Main Refiner Chest	5-80-720 B	PM, PM-10, VOC	24 tons/hr
E-PP-8	Vent, #5 Refiner Chest	5-80-720 B	PM, PM-10, VOC	6 tons/hr
F-PP-12	Broke Tank	5-80-720 B	VOC	186,736 gallons
F-PP-13	White Water Surge Tank	5-80-720 B	VOC	186,736 gallons
E-CP-1	Re-chipper Cyclone	5-80-720 B	PM, PM-10	6 tons/hr
E-PL-9	Vacuum Tank	5-80-720 B	PM, PM-10	10,415 scfm
E-PL-10	Wet End Seal Fan Vent	5-80-720 B	PM, PM-10	6878 scfm
F-AP-14	Asphalt Piles	5-80-720 B	PM, PM-10	20 tons/hr
F-AP-15	Asphalt Unloading	5-80-720 B	PM, PM-10	20 tons/hr
F-AP-16	Hammer Mill	5-80-720 B	PM, PM-10	20 tons/hr

<sup>&</sup>lt;sup>1</sup>The citation criteria for insignificant activities are as follows:

# **CONFIDENTIAL INFORMATION**

The facility did not request that any portion of the TV permit be made confidential.

<sup>9</sup> VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

<sup>9</sup> VAC 5-80-720 B - Insignificant due to emission levels

<sup>9</sup> VAC 5-80-720 C - Insignificant due to size or production rate

# **PUBLIC PARTICIPATION**

The public notice was originally placed in the Richmond Times-Dispatch on March 14, 2004. Two parties made comments during the 30 day public notice period, one being the permittee. The proposed permit was sent to EPA on June 11, 2004 and no comments were received.

For this amendment, the proposed permit will be placed on public notice in the Richmond Times Dispatch from May 5, 2007 to June 4, 2007. No public comments were received. The proposed permit was sent to EPA on May 3, 2007 (45 day comment period started May 5, 2007) and no comments were received.